The workshop organized in Florence (June 2014) was the first operational meeting between IHF and PHG planned to identify possible synergies in the development of knowledge, technical and operational products for the benefit of both Institution's members.

In this first meeting the priority was to identify common ground on priorities from both those in charge of the design and to those in charge of the management of hospitals. The topic of "containing the costs of healthcare facilities" was agreed on by both parties. It was decided that all dimensions of cost containment should be considered. All geographical areas, all socio-economic and cultural contexts of the world, should be considered at this initial stage. To reflect this option, the topic should be analyzed in a generic way so that it is possible to address cost containment in the most advanced countries as well as in the emerging and developing countries. A generic approach will also identify both universal rules and context specific features.

The expected final product is the development of guidelines and recommendations intended to steer the design towards solutions that contain costs of the initial investment as well as contain expenditure during Use, Management and Maintenance of the Facilities.

The workshop participants shared their experience and expertise to identify critical domains to explore for cost reduction, and formulate "recommendations" on the way forwards with this project.

IHF representatives were asked to highlight which components of the costs of management and maintenance mostly affect design choices and what type of saving are viable.

PHG representatives were asked to highlight what precautions are required today and adopted in the development of design proposal in order to achieve the objectives of cost containment, with particular attention to utilization costs.

Both were asked to take into account the different contextual conditions that may affect their approaches on cost containment.

By the end of the workshop, recommendations and comments were specifically focused on the actions to take for containment of:

- construction costs through design decisions.
- in Use and Management costs.
- the maintenance and for transformation of hospital facilities.

The above actions were to be related to the different socio-economic contexts and health systems in different countries.

The participants agreed that it is also important to break down cost into different components. They adopted the "design development process" to better target the different stages in which it is possible to have an impact on cost reduction:

1

- Technical cost/fees
- Value of works (construction cost)
- In-use cost
- Management cost
- Maintenance cost
- Refurbishment cost
- Demolition cost
- Infrastructure and mobility cost
- Sustainability cost

The validity of cost predictions remains a major challenge for constructions. Predictive costs often vary significantly from final costs (prediction validity). In a project decisions taken in advance stage are recognized to have a greater impact on cost than early decisions. For this reason, it is very important to include, during the feasibility stage, as many operating information as possible. This requires very clear descriptions of all the expected functions of the facility as well as operating modalities.

The "design development process" includes: feasibility study, project program, preliminary project, detailed project, construction phase, and post occupancy. For each phase an initial analysis identified possible elements that can influence cost.

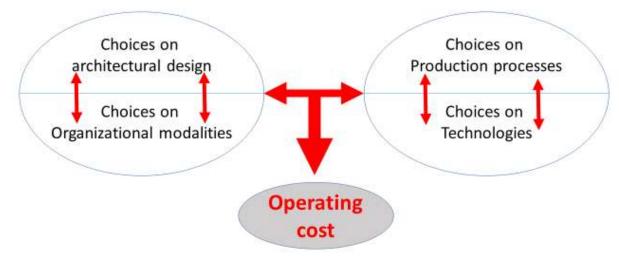
Putting all this information together allows to build a matrix that can be used as a roadmap for collecting information on cost reduction through hospital design. It will be possible to move through it, filling in information for each box of the matrix by following the same list of questions like as critical path.

- Identify key stakeholders and all informed parties to be involved in decision making
- Differentiate general interest and short term interest for each of the various stakeholders
- Identify bodies of knowledge that are available
- Differentiate information with regards to stakeholder (initial, basic, advanced and specialized knowledge)
- Provide a big-picture approach encompassing all factors, showcasing as many examples as possible
- Put forward golden rules stemming from reported experiences
- Expected and final outcome should be recommendations customized to contextual factors

This workshop allowed to adopt an analytical framework to better identify all stages where cost reduction should be addressed and in support to this framework a table was adopted to better identify for each stage the key stakeholders and their respective decision making responsibilities in cost of hospitals.

2

Constrains related to country: legal, financial, social, spatial, temporal



Given the primary objective of reaching conclusions and recommendations of operational use, the next step is to identify "personalities" (experts) with skills and knowledge to be able to develop "wisdom" in the form of rule of thumbs, eschewed from personal experience able to enrich the culture and knowledge of hospital designers and managers.

The goal of a joint UIA-PHG/IHF project is to share the resulting knowledge with national and international audiences. To achieve this goal, it is necessary to disseminate good practices and to put in place a mechanism for further improvement alongside future developments. This will require the project to have financial support from specific funders.

Next steps:

- To mobilize experiences that can contribute to build a knowledge base of recommendations.
- To further refine the framework and identify gaps for which research may be necessary, and work with Universities to respond to these gaps.

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